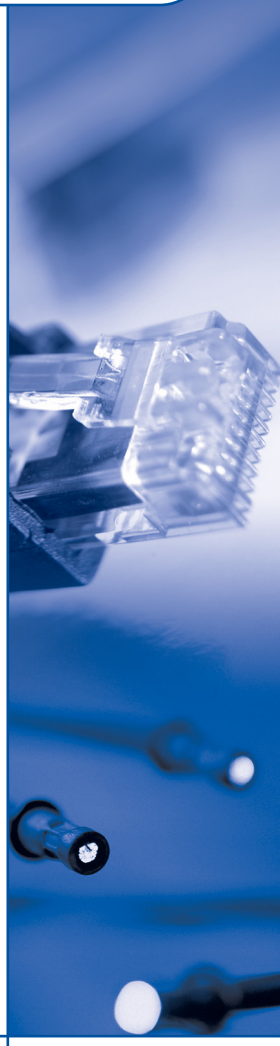
SIQURA®

SURVEILLANCE SOLUTIONS

Installation Manual

Siqura HSD620PRH/621PRH

Pressurized IP PTZ Camera with Day/Night, WDR



Note: To ensure proper operation, please read this manual thoroughly before using the product and retain the information for future reference.

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Siqura HSD620PRH and HSD621PRH 1.0.0
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Although considerable care has been taken to ensure a correct and suitably comprehensive description of all relevant components, the manual may nonetheless contain errors and inaccuracies.

Should you detect any errors or inaccuracies in the manual, we would be grateful if you would inform us. This helps us to further improve our documentation.

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Contents

1 INTRODUCTION 1

2 SAFETY 3

2.1 SAFETY INFORMATION 3
2.2 CAUTIONS 4
2.3 REGULATIONS 5

3 PRODUCT DESCRIPTION 7

3.1 PRODUCT OVERVIEW 7
3.2 GENERAL OPERATION REQUIREMENTS 8
3.3 PACKAGE CONTENTS 8

4 DOME SETUP AND CABLE CONNECTION 9

4.1 PREPARING THE SIQURA HSD620PRH AND HSD621PRH FOR INSTALLATION 9
4.2 SWITCH DEFINITION 10
4.3 COMMUNICATION SWITCH CONFIGURATION 11
4.4 ESTABLISHING A NETWORK CONNECTION 12
4.5 SYSTEM COMPATIBILITY 13
4.6 DOME CABLE DEFINITION AND REQUIREMENTS 13
4.6.1 Cable Requirements 13
4.6.2 Verifying Ethernet connectivity 13
4.6.3 Connecting, Aligning, and Mounting the Camera 14

5 PRESSURIZING THE CAMERA 17

5.1 PRESSURE SWITCH CALIBRATION 17
5.2 PRESSURIZING 18

6 DOME INSTALLATION 19

6.1 DOME DIMENSIONS 19
6.2 INSTALLATION SCENARIOS 19
6.3 CEILING MOUNT 20
6.3.1 Ceiling Mounting with a straight tube 20
6.4 WALL MOUNT 21
6.4.1 Mini wall mount 21
6.4.2 Wall mounting with gooseneck tube 22
6.4.3 Wall box mounting 23
6.5 CORNER MOUNT 24
6.6 POLE MOUNT 25
6.6.1 Pole thin/wide direct mounting 25
6.6.2 Pole thin/wide box mounting 27

7 APPENDIX A: CAMERA ACCESSORIES 29

7.1 MOUNTING ACCESSORIES 29
7.2 SIQURA HSD620PRH AND HSD621PRH ACCESSORIES 33

8 APPENDIX B: TECHNICAL SPECIFICATION 35

1 Introduction

Document scope

This manual applies to Siqura's pressurized IP PTZ dome cameras, the Siqura HSD620PRH and HSD621PRH. It describes how to install and connect the Siqura HSD620PRH and HSD621PRH cameras. Operation and configuration of the Siqura HSD620PRH and HSD621PRH cameras is covered in the user manual.

Intended audience

This manual is aimed at installers and technicians involved in the installation of network devices, such as the Siqura HSD620PRH and HSD621PRH.

Assumed skills and know-how

To work with the Siqura HSD620PRH and HSD621PRH camera, an installer or technician must have adequate knowledge and skills in the fields of:

- CCTV systems and components
- Electrical wiring and low-voltage electrical connections
- Ethernet network technologies and Internet Protocol (IP)
- Windows environments
- Web browsers
- Video, audio, data, and contact closure transmissions

Video compression methods

Specifications

The information given in this manual was current when published. Siqura reserves the right to revise and improve its products. All specifications are subject to change without notice.

Important information

Before proceeding, please read and observe all instructions and warnings in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service. When unpacking your product, check for missing or damaged items. If any item is missing, or if damage is evident, *do not install or operate this product*. Contact your supplier for assistance.

Typographical Conventions

Before you start using this guide, it is important to understand the typographical conventions used in the documentation. The following kinds of formatting in the text identify special information.

Formatting convention	Type of Information
Numbered list	Step-by-step procedures. You can follow these instructions to complete a specific task.
Special Bold	Items you must select, such as menu options, command buttons, or items in a list.
Emphasis	Used to emphasize the importance of a point or for variable expressions such as parameters.
CAPITALS	Names of keys on the keyboard. for example, SHIFT, CTRL, or ALT.
KEY+KEY	Key combinations for which the user must press and hold down one key and then press another, for example, CTRL+P, or ALT+F4.

2 Safety

In This Chapter

Safety Information 3
Cautions 4
Regulations 5

2.1 Safety Information

Introduction

The safety information contained in this section, and on other pages of this manual, must be observed whenever this unit is operated, serviced, or repaired. Failure to comply with any precaution, warning, or instruction noted in the manual is in violation of the standards of design, manufacture, and intended use of the module. Siqura assumes no liability for the customer's failure to comply with any of these safety requirements.

Trained Personnel

Installation, adjustment, maintenance, and repair of this equipment are to be performed by trained personnel aware of the hazards involved. For correct and safe use of the equipment and in order to keep the equipment in a safe condition, it is essential that both operating and servicing personnel follow standard safety procedures in addition to the safety precautions and warnings specified in this manual, and that this unit be installed in locations accessible to trained service personnel only.

Safety Requirements

The equipment described in this manual has been designed and tested according to the **UL/IEC/EN 60950-1** safety requirements.

Warning: If there is any doubt regarding the safety of the equipment, do not put it into operation.

This might be the case when the equipment shows physical damage or is stressed beyond tolerable limits (for example, during storage and transportation).

Important: Before opening the equipment, disconnect it from all power sources.

The equipment must be powered by a *SELV*[*] power supply. This is equivalent to a Limited Power source (LPS, see UL/IEC/EN 60950-1 clause 2.5) or a "NEC Class 2" power supply. When this module is operated in extremely elevated temperature conditions, it is possible for internal and external metal surfaces to become extremely hot.

[*] SELV: conforming to IEC 60950-1, <60VDC output, output voltage galvanically isolated from mains. All power supplies or power supply cabinets available from Siqura comply with these SELV requirements.

EMC

The equipment has been tested and found to meet the CE-regulations relating to EMC, and complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against interference to radio communications in any installation. The equipment generates, uses, and can radiate radio frequency energy; improper use or special circumstances may cause interference to other equipment or a performance decrease due to interference radiated by other equipment. In such cases, the user will have to take appropriate measures to reduce such interactions between this and other equipment.

Any interruption of the shielding inside or outside the equipment could make the equipment more prone to fail EMC requirements.

Non-video signal lines must use appropriate shielded Cat 5 cabling (S-FTP), or at least an equivalent. Ensure that *all* electrically connected components are carefully earthed and protected against surges (high voltage transients caused by switching or lightning).

ESD

Electrostatic discharge (ESD) can damage or destroy electronic components. *Proper precautions should be taken against ESD when opening the equipment.*

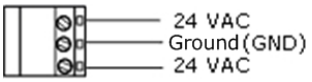
2.2 Cautions

Handle the camera carefully.

Do not abuse the camera. Avoid striking, shaking, etc. as the camera can be damaged by improper handling or storage.

Install electrical wiring carefully.

Ask a qualified electrician to perform the wiring for the installation. Please note that input electricity to the unit is at a tolerance of 24VAC 50/60 Hz ± 10%. Ground the camera appropriately to prevent electric shock or damage.



Power input: 3-pin terminal block

Do not disassemble the camera.

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside. Please consult technical support if a camera is suspected of malfunctioning.

Do not operate the camera beyond the specified temperature, humidity, and power source ratings

Use the indoor camera under conditions where the temperature is between 0°C~40°C (32°F~104°F).

Do not use strong or abrasive detergents when cleaning the camera.

Use a dry cloth to clean the camera when it is dirty. If the dirt is hard to remove, use a mild detergent and wipe gently. To clean the lens, use lens tissue or a cotton tipped applicator and ethanol. DO NOT clean the lens with strong detergents.

Never face the camera towards the sun.

Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects, as this can damage the camera.

2.3 Regulations

CE	This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions. ▸ This device may not cause harmful interference. ▸ This device must accept any interference received, including interference that may cause undesired operation.
	This symbol on the product or on its packaging indicates that this product shall not be treated as household waste in accordance with Directive 2002/96/EC. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By proper waste handling of this product you ensure that it has no negative consequences for the environment and human health, which could otherwise be caused if this product is thrown into the garbage bin. The recycling of materials will help to conserve natural resources. For more information on how to recycle this product, please contact your local city office, your household waste disposal service or the seller of the product.
	Compliance is evidenced by written declaration from our suppliers, assuring that any potential trace contamination levels of restricted substances are below the maximum level set by EU Directive 2002/95/EC, or are exempted due to their application.

3 Product Description

The Siqura HSD620PRH and HSD621PRH high-speed pressurized IP dome cameras are designed to deliver superb performance and durability with a pressurized housing. Pressurization eliminates the effects of moisture, dirt, and pollution on valuable camera equipment.

This manual covers the installation of both the Siqura HSD620PRH and HSD621PRH IP cameras.

In This Chapter

Product Overview 7
General Operation Requirements 8
Package Contents 8

3.1 Product Overview

Siqura HSD620PRH Features

- Outdoor High Speed Network PTZ dome
- Quad stream support: Dual H.264, MPEG-2, MPEG-4 and MJPEG
- 26x optical zoom/12x digital zoom
- Day/Night with IR-cut filter
- Back Light Compensation
- Wide Dynamic Range
- 400°/second preset targeting
- 360° endless panning
- 256 presets/8 programmable cruises
- 3 alarm in
- Two-way audio
- 24 privacy masks
- Pressurized to 7psi; able to hold pressure for up to 1 year
- Low pressure sensor, Shrader and pressure relief valves standard
- IP 67 ingress protection

Siqura HSD621PRH Features

- Quad stream support Dual H.264, MPEG-2, MPEG-4 and MJPEG
- 35x optical zoom/12x digital zoom
- Day/Night with IR-cut filter
- Wide Dynamic Range
- Back Light Compensation
- Electronic Image Stabilization
- 400°/second preset targeting
- 360° endless panning
- 256 presets/8 programmable cruises
- 3 alarm in
- Two-way audio
- 8 privacy masks

3.2 General Operation Requirements

A minimum of one control device is required for operation, such as a control keyboard, a DVR, or a PC. The Siqura HSD620PRH and HSD621PRH contains a built-in receiver that decodes commands originating from a control device.

The built-in Pelco D protocol provides connectivity to other surveillance systems and allows the Siqura HSD620PRH and HSD621PRH to be integrated with other suppliers' surveillance systems.

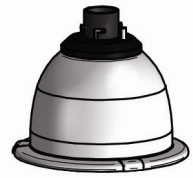
For more detailed information, see the Technical Specifications appendix.

3.3 Package Contents

Before proceeding, please verify that the box contains the items listed here. If any item is missing or has defects, *do not* install or operate the product. Contact your supplier for assistance.

Siqura HSD620PRH and HSD621PRH

Dome camera



Pressurized housing

Dome cover

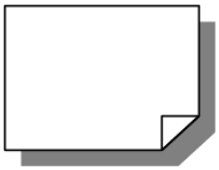
Ring

Bracket

Teflon tape

Connectors

Security TORX



Quick start guide

CD containing manuals

4 Dome Setup and Cable Connection

Before installing or connecting the Siqura HSD620PRH and HSD621PRH, please refer to this section and complete the preliminary preparations for setting up the dome camera and establishing switch settings.

In This Chapter

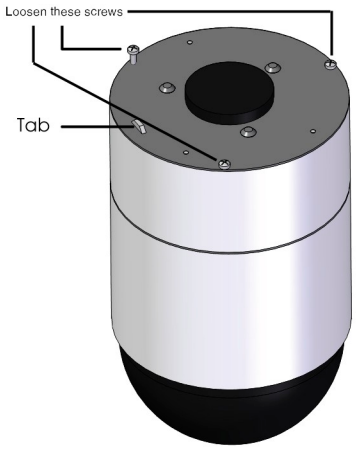
Preparing the Siqura HSD620PRH and HSD621PRH for Installation 9
Switch Definition 10
Communication Switch Configuration 11
Establishing a Network Connection 12
System Compatibility 13
Dome Cable Definition and Requirements 13

4.1 Preparing the Siqura HSD620PRH and HSD621PRH for Installation

This preliminary installation procedure is for the Siqura HSD620PRH and HSD621PRH dome cameras.

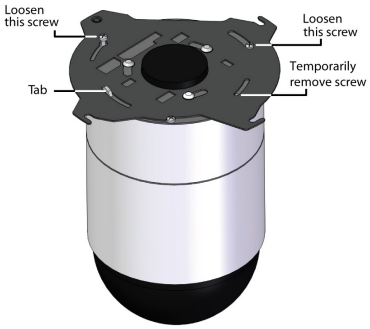
Perform the following steps to prepare the dome camera for installation

1. Unpack the dome package and take out the dome body.
2. Loosen the screws that secure the bracket to the camera as indicated in the figure below.

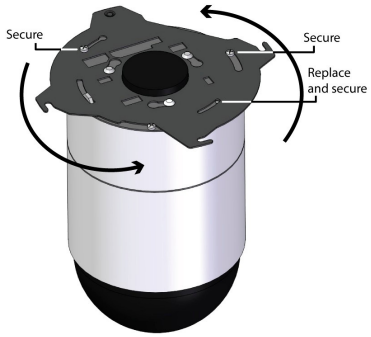


Camera unit before bracket attached

3. Temporarily remove the screw indicated below.
4. Assemble the bracket and rotate it into position.
5. Replace the removed screw and then tighten all four screws.



Removing the bracket

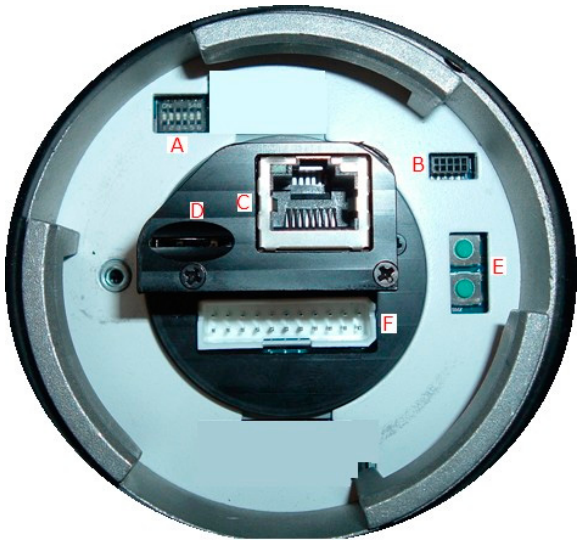


Replacing the bracket

4.2 Switch Definition

It is necessary that the dome ID and communication protocol remain in the default modes when connecting the Siqura HSD620PRH and HSD621PRH cameras to other devices. The switches used for configuring these settings are located on the bottom of the dome camera. These settings are preset to operate the camera with the IP hardware. Changing the settings may make the camera inoperative using the IP connection.

Refer to the figure and table below for switch location and definitions.



Siqura HSD620PRH and HSD621PRH switches

Switch	Definition
A	Communication switch
B	ISP connector (for firmware upgrades)
C	RJ-45/SFP connector
D	SD card slot
E	Reset buttons
F	22-pin connector

Note: Switch E has two buttons. Only the button closest to the 22-pin connector is used to restore factory server defaults. The other button is reserved.

To restore factory server defaults

- Power up the camera while holding button E. Continue to hold the button for 30 seconds after powering the camera.

Note: The dome control protocol is set to Pelco-D. Do not change the dome control switches on the IP cameras.

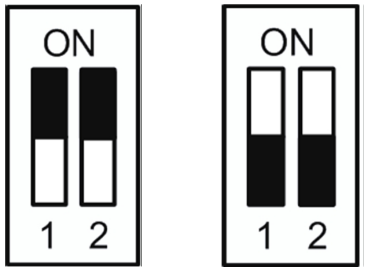
4.3 Communication Switch Configuration

The Siqura HSD620PRH and HSD621PRH's communication switch is specified in the table below. The default settings are depicted in the figure. You are advised to verify the accuracy of the communication switch configuration but do not change the default settings, or some functions may not work properly.

Communication Switch	Switch	Description
	1	RS-485
	2	
	3	Termination
	4	Line lock
	5	System initialization. Switch 5 is mainly used to restore the camera's factory defaults.
	6	Camera upgrade. Users must reset switch 6 after firmware upgrades are carried out.

RS-485 is the interface that enables communication between the Siqura HSD620PRH and HSD621PRH and its control device. This means that the camera's RS-485 setup and that of the control device must be the same. The RS-485 default setting is half-duplex, as shown in the figure below. Please do not change the default setting without consulting a qualified specialist or supplier.

Half duplex **Full duplex**



RJ-485 settings

4.4 Establishing a Network Connection

To open communication with the Siqura HSD620PRH and HSD621PRH from a host PC and change the unit's network settings, perform the following steps.

Step 1: Set the PC's network adapter to the unit's factory default subnet and connect the two devices.

Step 2: Access the unit from a web browser or other tool installed on the PC.

Step 3: Set the unit's IP address and subnet mask to the subnet it will be used in and reboot the unit.

To address the unit from the same PC again, configure the PC's network adapter once more to assign the PC to the same subnet as the unit.

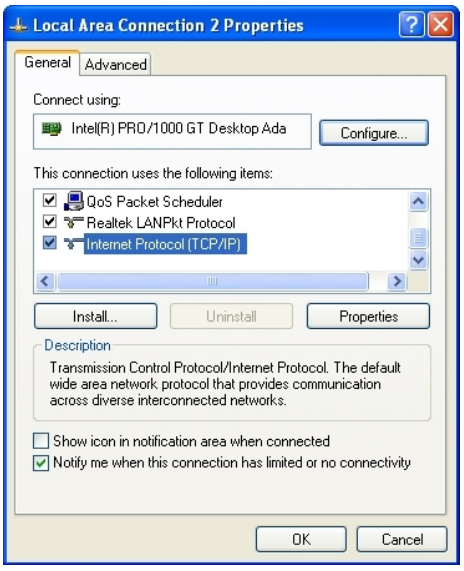
Step 1: Setting the host PC to the factory default subnet of the unit

To configure the network adapter on the host PC

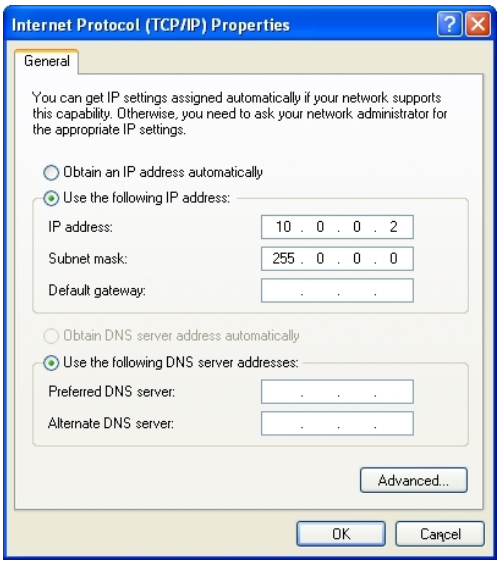
1. In the Control Panel, open **Network Connections**.
2. Right-click the connection to be configured, and select **Properties**.
3. In the items list, select **Internet Protocol (TCP/IP)**.
4. Click **Properties**.
5. In the Internet Protocol (TCP/IP) Properties dialog, click **Use the following IP address**.
6. Enter an IP address that will assign your PC to the same subnet as the unit (i.e., within the 10.x.x.x range). Use 255.0.0.0 as a subnet mask.

Important: To prevent conflicts, be sure to choose a unique IP address. No two devices on a network can have the same IP address.

7. To apply the new settings, click **OK**, and then click **Close**.



Opening IP settings on the host PC


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 10 . 0 . 0 . 2
Subnet mask: 255 . 0 . 0 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Changing host PC IP settings to the factory-default settings of the unit

At this point, connect your PC to the Siqura HSD620PRH and HSD621PRH. You can connect them directly using a crossover cable, or connect both to a switch.

Step 2: Accessing the unit

Using a standard web browser you can now log on to the Siqura HSD620PRH and HSD621PRH's internal web server.

Step 3: Changing the unit's network settings

The Network web page enables you to make the unit's network addressing compatible with the network it will be hooked into. You can set a fixed IP address or have the IP address assigned by a DHCP server. In the latter case, open the Advanced Settings and enable DHCP. Do not forget to save and reboot the unit after changing the settings.

4.5 System Compatibility

To ensure system compatibility, download the latest firmware from Support > Software on the Siqura web site at http://www.siqura.com/. Registration is required.

4.6 Dome Cable Definition and Requirements

For operation, the Siqura HSD620PRH and HSD621PRH cameras require either an Ethernet cable or an appropriate fiber optic cable to carry the signals to a remote viewing site and a cable to power the dome.

4.6.1 Cable Requirements

For operation, the camera requires a video and cable harness, as described below.

- A cable to provide a 24 VAC power supply to the dome.
- A Cat-5 Ethernet cable.
- Optional cable for alarms.

Important: Ensure the power supply corresponds with the dome's power requirement, or damage will occur. If any mistake happens, contact a qualified technician.

4.6.2 Verifying Ethernet connectivity

Refer to the following figure to determine whether you have established an Ethernet connection.

Ethernet socket LEDs green/yellow
Green on/off : 100/10 Mbit
Yellow on/blink
Yellow off/flash

4.6.3 Connecting, Aligning, and Mounting the Camera

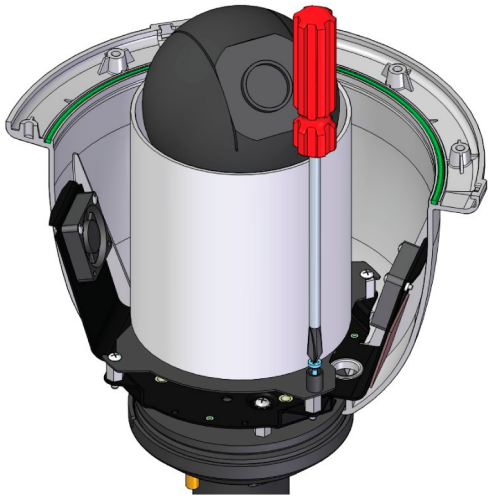
Once you have configured the protocol and network switches, connect the main cable to the base of the camera and make the appropriate connections.

To align mount the pressurized camera:

1. Attach the cable harness to the camera

Attaching cable to the pressurized camera

2. Secure the camera to the housing



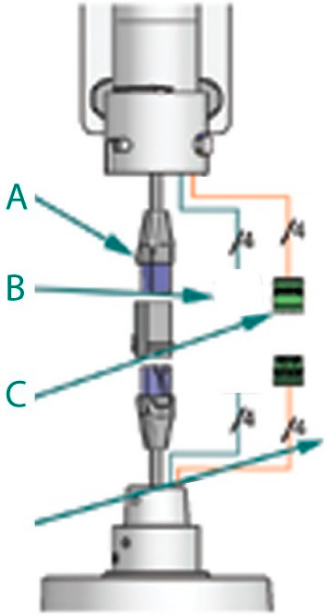
Securing the camera to the housing

3. Attach the dome to the housing

Align the dome

Secure the dome

4. Connect the cable as follows:



IP connection configuration

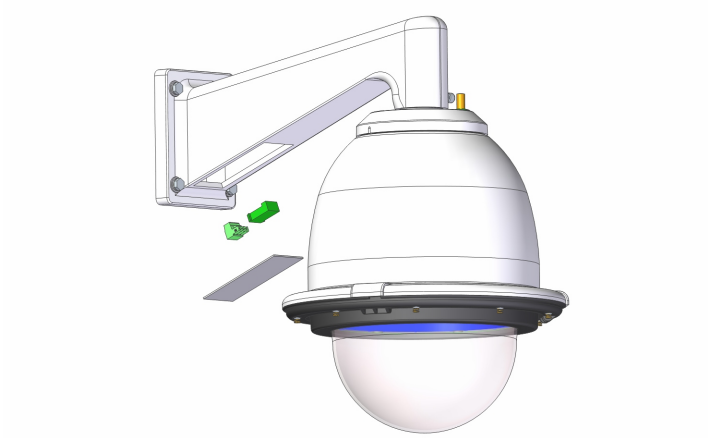
A RJ45

B

1/0		
1	Alarm 1	Red White
2	Alarm 2	Gray
3	Alarm 3	Purple
4	Common	Brown

C

24VAC			POWER
1	Camera	Black	75 Watts
3	Camera	Green Red	



Cable connection in a mini wall mount

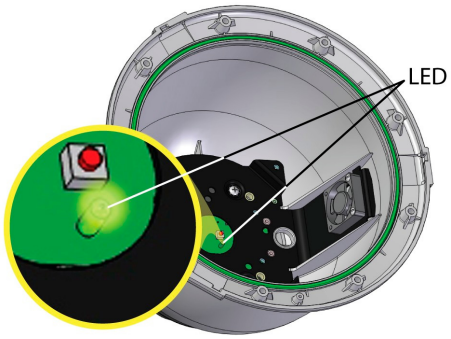
5 Pressurizing the Camera

Before mounting, the Siqura HSD620PRH and HSD621PRH camera's pressure sensor must be calibrated and the housing pressurized. The Low Pressure alarm uses an absolute pressure sensor and must be calibrated to the local altitude.

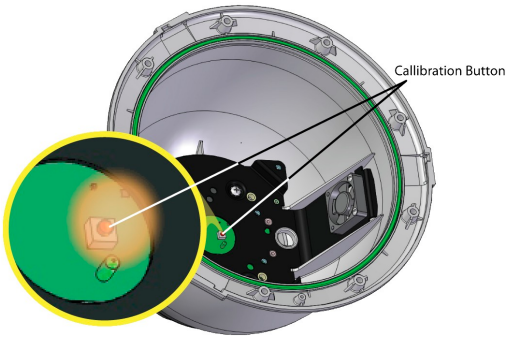
5.1 Pressure switch calibration

To calibrate the pressure sensor.

Power up the unit. The green LED located in the center of the camera bracket will turn on. After 30 seconds the LED will begin to blink.



Press the red button located next to the LED. LED will turn off indicating unit is calibrated.



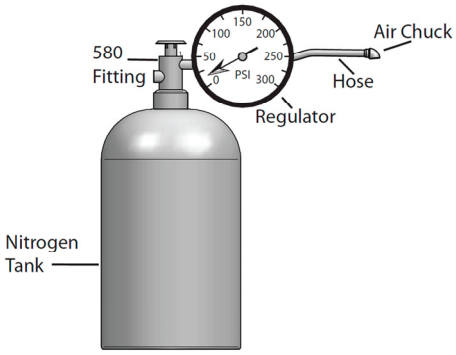
Calibration is now complete. The camera will store this base value and should not need to be recalibrated. To recalibrate repeat the above procedure.

Note: Alarm sensor contact is open when pressurized and closed when the enclosure is not pressurized. The Sensor will activate (open) at .5psi. and (close) at 1 psi.

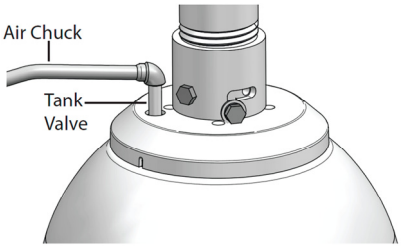
5.2 Pressurizing

To pressurize the Siqura HSD620PRH and HSD621PRH camera

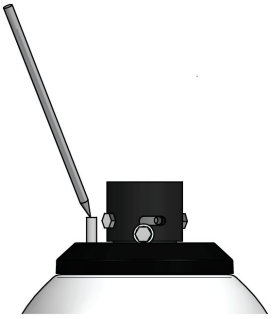
Set the gauge or regulator from 10 to 20psi (.7 to 1.4bar).



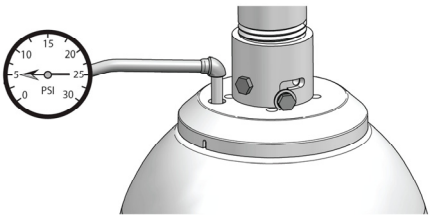
Place the air chuck on the tank valve and begin filling until pressure relief valve opens.



Open the relief valve. Drain all air from the housing and 3 times to remove all moisture.



After purging check the housing pressure. It should be around 5psi (.34bar).



6 Dome Installation

Based on the installation environment, the Siqura HSD620PRH and HSD621PRH cameras can be installed using a ceiling, wall, corner, or pole mount. In the following sections, various installation methods and installation procedures are described in detail.

In This Chapter

Dome Dimensions 19
Installation Scenarios 19
Ceiling Mount 20
Wall Mount 21
Corner Mount 24
Pole Mount 25

6.1 Dome Dimensions

The Siqura HSD620PRH and HSD621PRH dome dimensions are 366 x 285 x Ø285 mm (14.4 x 11.2 x Ø11.2 in).

6.2 Installation Scenarios

Choose your installation scenario from the list below for complete instructions for performing that installation.

Important: Whatever your scenario, always use the safety line when attaching the dome.

Ceiling mounts

- Ceiling mounting with a straight tube

Wall mounts

- Mini wall mount
- Wall mounting with gooseneck tube
- Wall box mounting

Corner mounts

- Corner Mount

Pole mounts

- Pole thin/wide direct mounting
- Pole thin/wide box mounting

For descriptions of the various accessories required for each installation, see Appendix A: Camera Accessories.

Note: Some illustrations in this section use the term "plane washer". This is also known as a flat washer.

Warning: Fully torque down the mounting bolt that attaches the WM02 tube adapter to the mounting bracket to prevent any movement of the camera due to wind, vibration, etc.

Make sure the camera cannot move at all in its bracket after installation. Any movement of the camera in its bracket can compromise positional accuracy.

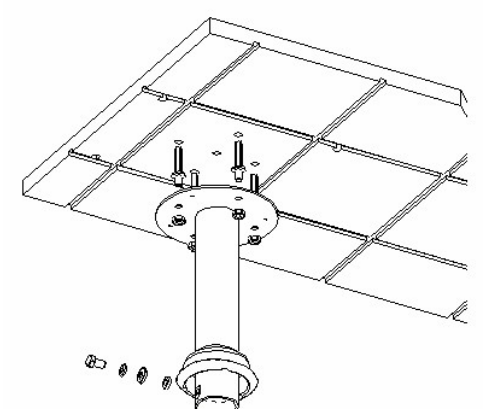
6.3 Ceiling Mount

There is one ceiling mounting option for the Siqura HSD620PRH and HSD621PRH outdoor dome cameras:

- Ceiling mounting with a straight tube

6.3.1 Ceiling Mounting with a straight tube

The only ceiling mount for the Siqura HSD620PRH and HSD621PRH dome cameras is the straight tube mount.



Ceiling Mount: straight tube

The straight tube is available in lengths of 25 cm and 30 cm.

Items needed

5. Dome camera
6. Straight tube and other equipped items (optional accessory)
7. Screws and screw anchors for fixing the straight tube onto the ceiling (not supplied)

Tools needed

8. Drill
9. Screwdriver

To mount the dome with a straight tube

1. Ensure that the ceiling can support the weight of the dome camera and straight tube.
2. Make a cable entry hole in the ceiling. Otherwise, cables can be threaded through the cable entry hole on the tube.
3. Attach the waterproof boot to the straight tube.
4. Fix the straight tube to the ceiling with proper screws and screw anchors (not supplied).
5. Thread the cables through the straight tube and the tube adaptor.

Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.

6. Fix the outdoor tube adaptor to the straight tube with the supplied screws and washers. Then adjust the waterproof boot to the junction of the straight tube and the outdoor tube adaptor.
7. Connect the cables to the dome camera. Then attach the dome to the outdoor tube adaptor and fix them with the supplied screw.

6.4 Wall Mount

There are three types of wall mounts for the Siqura HSD620PRH and HSD621PRH dome camera.

- Mounting with a mini wall mount, as shown in the section Mini wall mount.
- Mounting with a gooseneck tube, as shown in the section Wall mounting with gooseneck tube.
- Mounting with a wall box, as shown in the section Wall box mounting.

6.4.1 Mini wall mount

Items Needed

- Dome camera
- Mini wall mount and other equipped items (optional accessory)
- Screws and screw anchors (not supplied)
- Indoor tube adaptor for the Siqura HSD620PRH and HSD621PRH (optional accessory)
- Waterproof boot (supplied with the indoor tube adaptor)

Tools Needed

- Drill
- Screwdriver

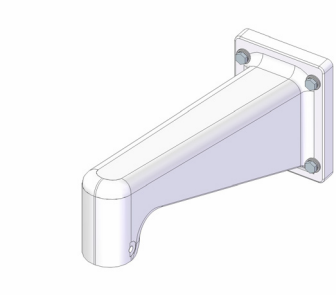
To mount the dome with the mini wall mount

1. Make a cable entry hole in the wall to recess the cables. Otherwise, cables can be threaded through the cable entry hole on the mount.
2. Thread the cables through the mini wall mount and out through either the cable entry hole in the wall or the hole in the mini wall mount.
3. Fix the wall mount to the wall with proper screws and screw anchors.
4. Attach the waterproof boot to the mini wall mount.
5. Thread the cables through the tube adaptor and lock it to the mini wall mount with the supplied screws and washers.

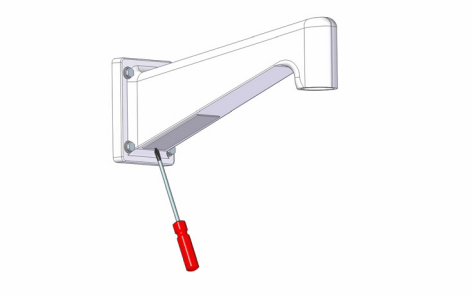
   At this point, the dome can be suspended from the mini wall mount using the safety wire.
6. Block the mount's cable entry hole.

   If the cable is threaded into the wall, block the hole in the mount with the supplied plate.

   If the cable is threaded through the neck of the wall mount, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.
7. Attach the lock screw plate to the dome plate with the supplied screw, as depicted in the section Ceiling mounting with a straight tube.
8. Adjust the waterproof boot to the junction of the mini wall mount and the indoor tube adaptor.
9. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



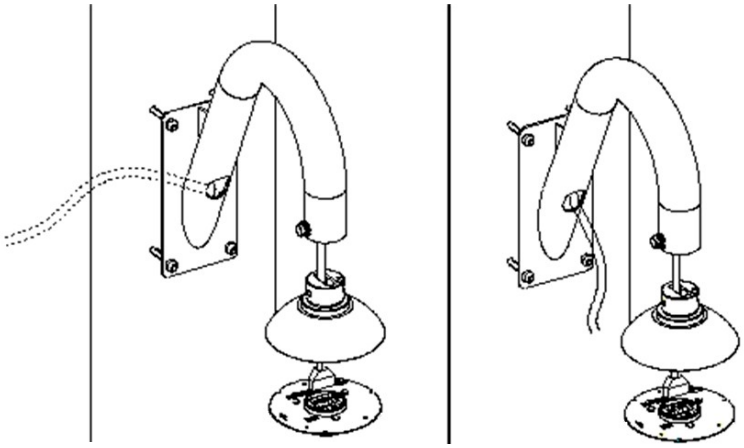
Mini wall mount



Mini wall mount with secured cable entry plate

6.4.2 Wall mounting with gooseneck tube

The following figure shows how cables run through the tube.



Gooseneck with recessed (left) and exposed (right) cabling

Items Needed

- Dome camera
- Gooseneck tube and other equipped items (optional accessory)
- Waterproof boot (standard accessory with the indoor tube adaptor)
- Screws and screw anchors (not supplied)
- Indoor tube adaptor for the Siqura HSD620PRH and HSD621PRH (optional accessory)

Tools Needed

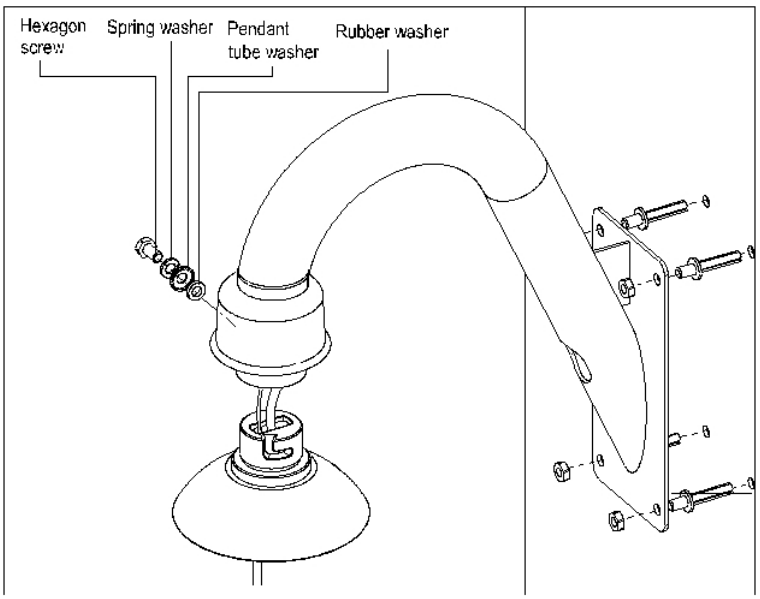
- Drill
- Screwdriver

To mount the dome with the gooseneck tube

1. Make a cable entry hole in the wall to recess the cables. Otherwise, cables can be threaded through the cable entry hole on the mount.
2. Thread the cables through the mini wall mount and out through either the cable entry hole in the wall or the hole in the mini wall mount.
3. Fix the gooseneck tube to the wall with proper screws and screw anchors.
4. Attach the waterproof boot to the gooseneck tube.
5. Thread the cables through the gooseneck tube and the tube adaptor and lock it to the mini wall mount with the supplied screws and washers.

   At this point, the dome can be suspended from the mini wall mount using the safety wire.

6. Block the mount's cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.
7. Attach the lock screw plate to the back of the dome with supplied screw, as depicted in the section Ceiling mounting with a straight tube.
8. Adjust the waterproof boot to the junction of the gooseneck tube and the tube adaptor.
9. Connect the cables to the dome camera, attach the dome to the indoor tube adaptor, and fasten them together with the supplied screw.



Wall mounting: gooseneck tube + indoor tube adaptor + waterproof boot

6.4.3 Wall box mounting

Items Needed

- Dome camera
- Wall box mount and other equipped items (optional accessory)
- Gooseneck tube (optional accessory)
- Screws and screw anchors (not supplied)
- Indoor tube adaptor for the Siqura HSD620PRH and HSD621PRH (optional accessory)
- Waterproof boot (supplied with the indoor tube adaptor)

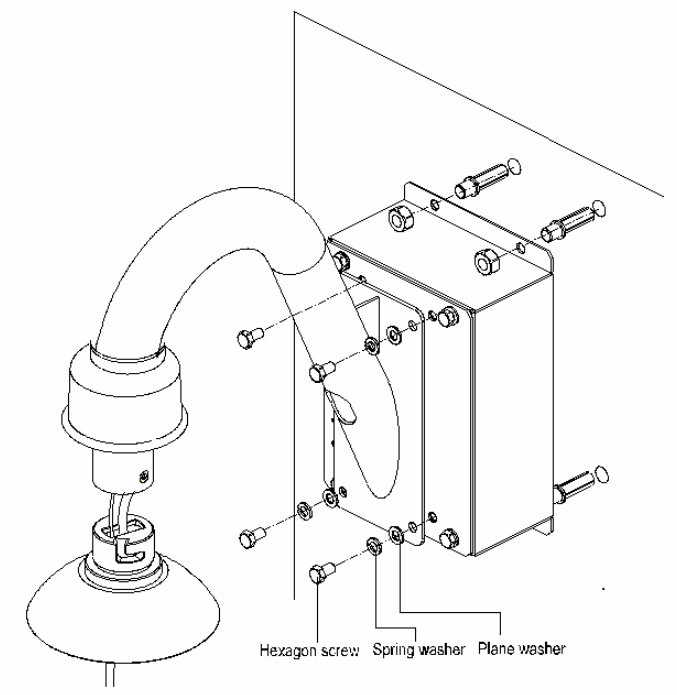
Tools Needed

- Drill
- Screwdriver

To mount the dome with the gooseneck tube and wall box

1. Fix the wall box to the wall with proper screws and screw anchors.
2. Fasten the gooseneck tube to the wall box with the supplied screws and washers.
3. Attach the waterproof boot to the gooseneck tube.
4. Thread the cables through the gooseneck tube and the tube adaptor.
   After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.
5. Attach the lock screw plate to the back of the dome with the supplied screw, as depicted in the section Ceiling mounting with a straight tube.
6. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.

Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Wall box mounting: wall box mount + gooseneck tube + waterproof boot + indoor tube adaptor

6.5 Corner Mount

With the corner standard mounting plate and gooseneck tube/mini wall mount, the Siqura HSD620PRH and HSD621PRH can be mounted onto the corner or a wall.

Items Needed

- Dome camera
- Gooseneck tube/mini wall mount and other equipped items (optional accessory)
- Corner standard mounting plate (optional accessory)
- Indoor tube adaptor for the Siqura HSD620PRH and HSD621PRH (optional accessory)
- Waterproof boot (supplied with the indoor tube adaptor)
- Screws and screw anchors for fixing the corner standard mounting plate (not supplied)

Tools Needed

- Drill
- Screwdriver

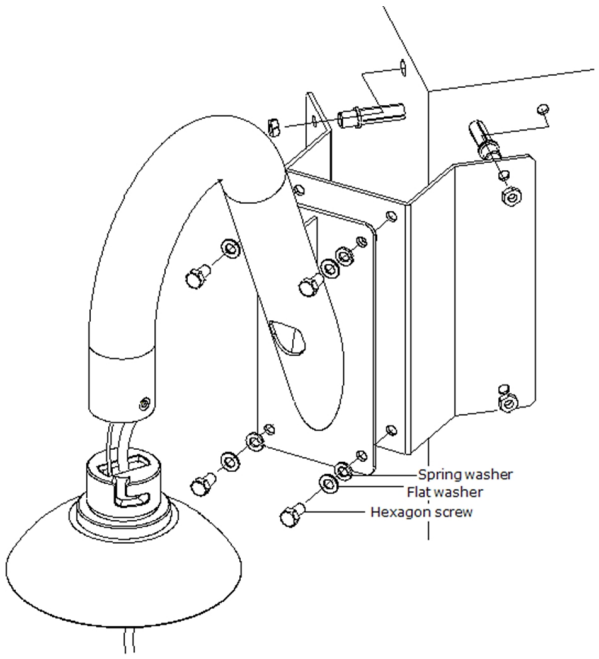
To mount the dome camera with the corner standard mounting plate and gooseneck tube/mini wall mount

1. Make a cable entry hole on the wall to recess the cables. Otherwise, cables can be threaded through the cable entry hole on the tube.
2. Fix the corner standard mounting plate on a corner with the proper screws and screw anchors.
3. Attach the gooseneck tube/mini wall mount to the fixed mounting plate with the supplied screws and washers.
4. Attach the waterproof boot to the gooseneck tube/mini wall mount.
5. Attach the indoor tube adaptor to the gooseneck tube/mini wall mount.

6. Thread the cables through the gooseneck tube/mini wall mount and the indoor tube adaptor.

Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.

7. Attach the fixing plate to the back of the dome with the supplied screw.
8. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.
9. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Corner wall mounting: corner standard mounting plate + gooseneck tube/mini wall mount + indoor tube adaptor + waterproof boot

6.6 Pole Mount

There are two ways to mount the Siqura HSD620PRH and HSD621PRH cameras on a pole:

- Using a thin/wide direct mount as described in the section Pole thin/wide direct mounting.
- Using a thin/wide box mount as described in the section Pole thin/wide box mounting.

6.6.1 Pole thin/wide direct mounting

The dome can be installed to a pole with a thin/wide direct mounting accessory and a gooseneck tube.

Items Needed

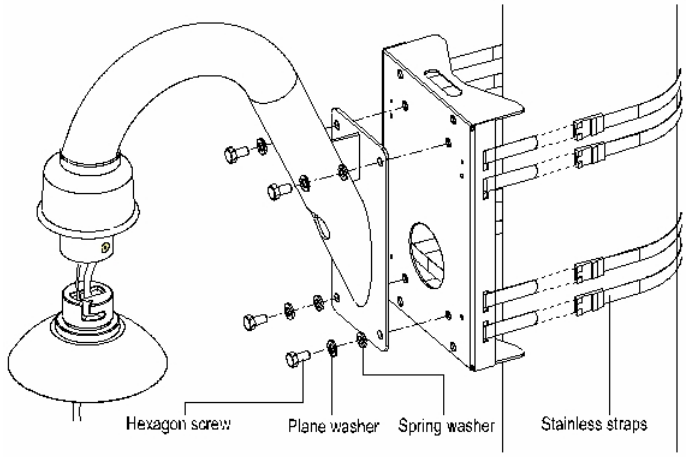
- Dome camera
- Gooseneck tube and other equipped items (optional accessory)
- Indoor tube adaptor for the Siqura HSD620PRH and HSD621PRH (optional accessory)
- Waterproof boot (supplied with the indoor tube adaptor)
- Pole thin direct mounting (optional accessory)
- Stainless steel straps (optional accessory)

Tools Needed

- Stainless strap cutter (optional accessory)
- Screwdriver

To mount the dome camera with the pole thin direct mounting and gooseneck

1. Fasten the pole thin direct mounting to a pole with the supplied stainless steel straps.
2. Fix the gooseneck tube to the pole direct mounting with the supplied screws and washers.
3. Attach the waterproof boot to the gooseneck tube.
4. Thread the cables through the gooseneck tube and the tube adaptor.
   After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.
5. Attach the lock screw plate to the back of the dome with the supplied screw, as depicted in the section Ceiling mounting with a straight tube.
6. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.
7. Connect the cables to the dome camera. Then attach the dome to the tube adaptor and fasten them together with the supplied screw.



Pole direct mounting: pole thin direct mounting + gooseneck tube + indoor tube adaptor + waterproof boot

6.6.2 Pole thin/wide box mounting

Items Needed

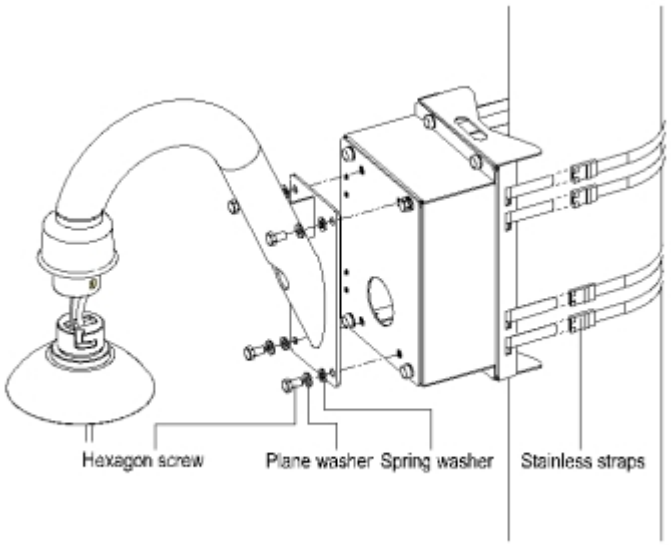
- Dome camera
- Gooseneck tube and other equipped items (optional accessory)
- Indoor tube adaptor for the Siqura HSD620PRH and HSD621PRH (optional accessory)
- Waterproof boot (supplied with the indoor tube adaptor)
- Pole wide box (optional accessory)
- Stainless steel straps (optional accessory)

Tools Needed

- Stainless strap cutter
- Screwdriver

To mount the dome camera with the pole box and gooseneck tube

1. Fasten the pole wide box on a pole with equipped stainless steel straps.
2. Fix the gooseneck tube to the pole box with the supplied screws and washers.
3. Attach the waterproof boot to the gooseneck tube.
4. Thread the cables through the gooseneck tube and the tube adaptor.
   Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.
5. Attach the lock screw plate to the back of the dome with the supplied screw, as depicted in the section Ceiling mounting with a straight tube.
6. Adjust the waterproof boot to the junction of the gooseneck tube and the tube adaptor.
7. Connect the cables to the dome camera, attach the dome to the tube adaptor, and fasten them together with the supplied screw.



Pole box mounting: pole wide box + gooseneck tube + indoor tube adaptor + waterproof boot

7 Appendix A: Camera Accessories

Before installing the camera, compare your accessories to those listed in this section and ensure that you have all the parts you need for your installation.

Important: If anything is missing, do not install the dome. Contact your supplier for assistance.

In This Chapter

Mounting Accessories 29
Siqura HSD620PRH and HSD621PRH Accessories 33

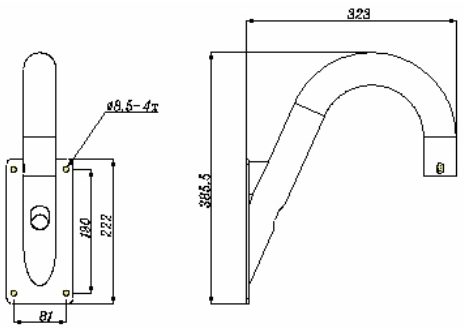
7.1 Mounting Accessories

All mounting accessories are optional. To secure the camera to the tube or wall mount, all tube mounts and the mini wall mount are supplied with the following.

- Cup washer (1)
- 8mm spring washer (1)
- 8mm rubber gasket (1)
- M8*12 screw (1)
- Waterproof boot (1)

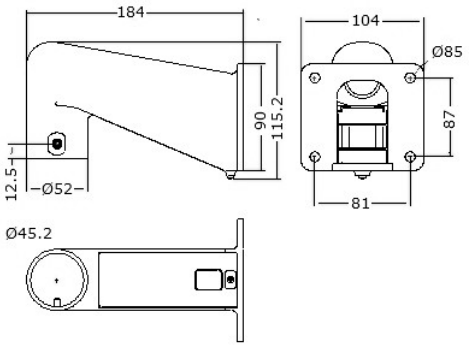
WM03A / Gooseneck Tube

White Color; Iron, 298×385 mm (11.73×15.56 in.); 2.1 kg (4.6 lbs).
(Gasket plate and cable gland for IP66 rated installations included)



WM01A / Mini Wall Mount

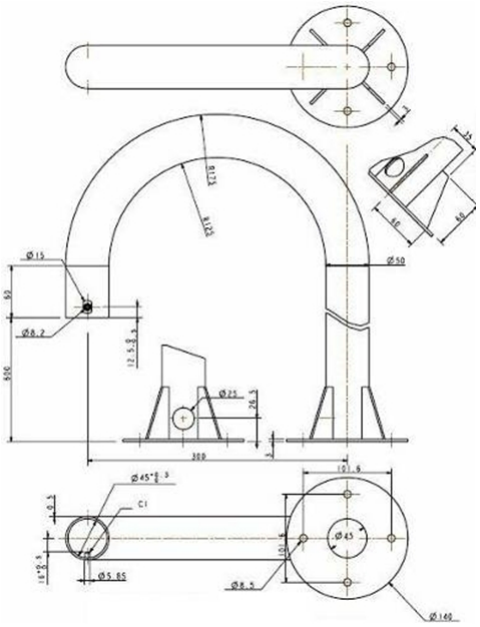
White; 184×104×115.2 mm (7.24×4.09×4.54 in.); 0.6 kg (1.2 lbs).
(Gasket plate and cable gland for IP66 rated installations included)



PM05 / Swan-neck Mount

White, Iron, Height: 250/500 mm (9.8/19.7 in.), Diameter: 50 mm (2 in.)

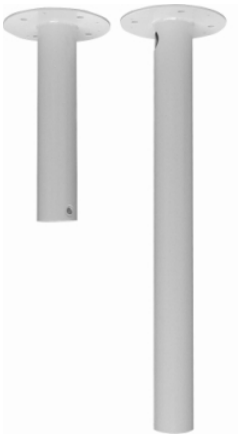
1 kg (2.2 lbs) / 1.8 kg (4 lbs).

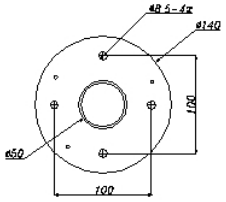


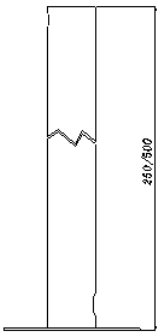
CM01 (250mm)/CM02 (500mm) / Straight Tube

White, Iron, Height: 250/500 mm (9.8/19.7 in.), Diameter: 50 mm (2 in.)

1 kg (2.2 lbs) / 1.8 kg (4 lbs).

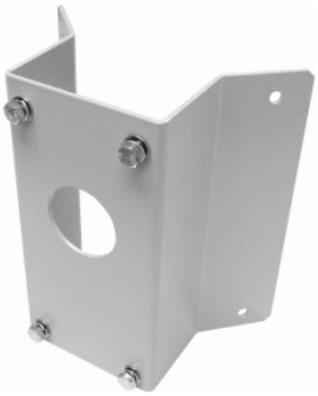


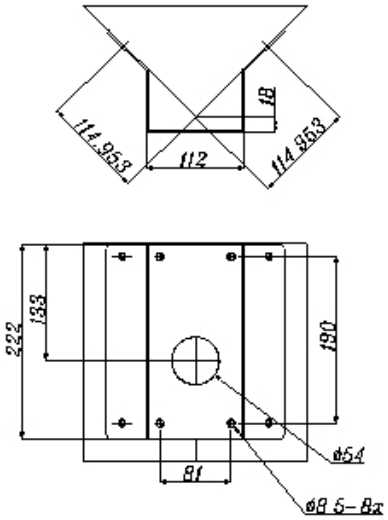




WM05 / Corner Standard Mounting Plate

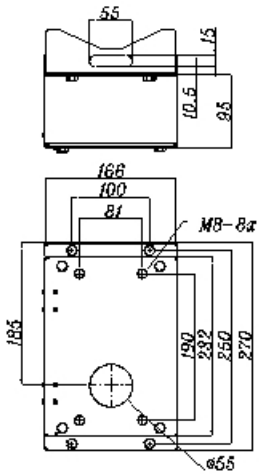
White, 222×204×117 mm (8.7×8×4.6 in.); 2 kg (4.4 lbs); Supplied with 8mm washer ×4, spring washer×4, M8*16 screw×4, M8 nut×4.





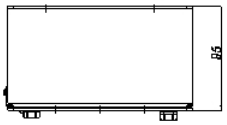
PM04 / Pole Wide Box

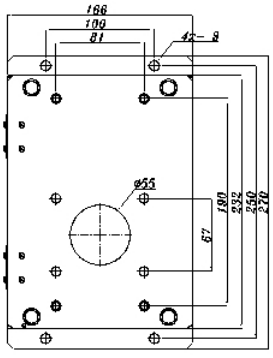
White/Ivory, 270×166×155 mm (10.6×6.5×6.1 in.); 3.2 kg (7.1 lbs); Supplied with M8*16 screw×4, washer×4, spring washer×4, stainless steel straps×4.



WM06 / Wall Box Mounting

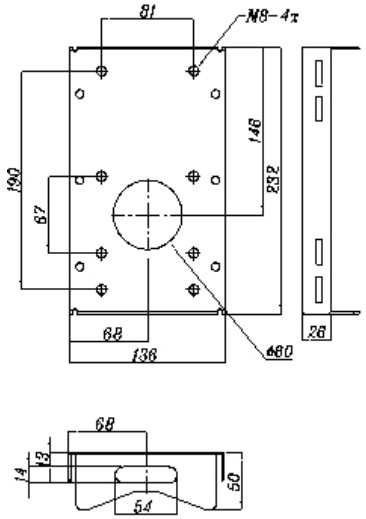
Ivory, 270(L)×166(W)×95(D) (10.6×6.5×3.7 in.); 2.2 kg (4.84 lbs); Supplied with M8*16 screw×4, washer×4, spring washer×4





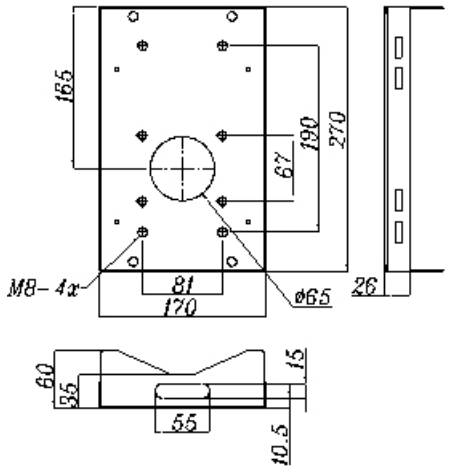
PM01 / Pole Thin Direct Mounting

White/Ivory, 232×136×60 mm (9.1×5.4×2.4 in.); Diameter: 112~140 mm (4.4~5.5 in.); 0.7 kg (1.6 lbs); Supplied with stainless steel straps×4, M8*16 screw×4, washer×4.



PM02 / Pole Wide Direct Mounting

White/Ivory, 270×170×60 mm (10.6×6.7×2.4 in.); Diameter: 112~130 mm (4.4~5 in.); 1 kg (2.2 lbs); Supplied with stainless steel straps×4, M8*16 screw×4, washer×4.



ST01 / Stainless Steel Straps

For fixing Pole Direct Mounting/ Pole Box on the pole.
Length: 700 mm (27.5 in.); Width: 0.63"; 0.02 kg (0.04 lbs)

ST02 / Stainless Strap Cutter

For tension, cut and crimp stainless steel straps. 1.4 kg (3.1 lbs)
Suitable for straps width: 1/2", 5/8", 3/4"

7.2 Siqura HSD620PRH and HSD621PRH Accessories

PA02 Power Adapter (optional)

- Input: 100~115VAC/Output: 24VAC 72VA (US)

OR

- Input: 220~230VAC/Output: 24VAC 72VA (EU/UK)

Note: When wiring, make sure the G/Y wire (Ground) is inserted into the mid-pin of the terminal block

PA03 Power Adapter (optional)

- Input: 110~115VAC/Output: 24VAC 72VA (US)

OR

- Input: 220~230VAC/Output: 24VAC 72VA (EU/UK)

Note: When wiring, make sure the G/Y wire (Ground) is inserted into the mid-pin of the terminal block

8 Appendix B: Technical Specification

Item		Siqura HSD620PRH	Siqura HSD621PRH
CAMERA			
Image Sensor		1/4" CCD	
Optical Zoom		26x	35x
Digital Zoom		12×	
Effective Pixels	NTSC	380k	
	PAL	440k	
Horizontal Resolution		540 TVL	
Electronic Shutter		1~1/10 k s	1/30 k/s
Synchronization		Internal/Line Lock	
Video Output		1.0 Vpp/75Ω, RJ-45, SPF	1.0 Vpp/75Ω, BNC (gold-plated center pin)
S/N Ratio		>50 dB (AGC off)	
Minimum Illumination		0.09 lux, 0.01 lux (B/W)	0.1 lux (color), 0.01 lux (B/W)
Focal Length		3.5 ~ 91 mm	3.4 ~ 119 mm
Focus Mode		Auto / Manual	
White Balance		Auto / Manual	
Iris Control		Auto / Manual	
AGC Control		Auto / Manual	
Backlight Compensation		On / Off	
VIDEO			
Number of video streams		2x H.264, 2x MPEG-4, MPEG-2, and/or MJPEG	
Frame rate		1 to 30 fps	
Compression algorithm		H.264 BP (ISO/IEC 14496-10), MPEG-4 SP Layer 5 (ISO/IEC 14496-2), MJPEG	H.264 BP (ISO/IEC 14496-10), MPEG-4 SP Layer 5 (ISO/IEC 14496-2), MPEG-2 (ISO/IEC 13818-2), MJPEG
RESOLUTION			
Type of streaming		UDP/IP (multi- and /or unicast), TCP/IP (RTP over RTSP)	UDP/IP (multi- and /or unicast)
Number of output streams		Up to 20	
Video Motion Detection		Yes, user-defined masking	
Encoding latency		<130 ms typ	
GOP structure		I, IP (selectable/ user profiles)	
Frame rate		1 to 30 fps	

Item	Siqura HSD620PRH	Siqura HSD621PRH
Quad streaming	D1@30fps H.264; +D1@30fps MPEG-4; +CIF@1fps MJPEG	
Output data rate	Up to 20 Mb/s (CBR or VBR selectable/user profiles)	
Video settings	User profiles, contrast, brightness, color saturation, hue, sharpness	
On Screen Display (OSD)	3x text lines (configurable: position, color, border/outline color, font size); 1x image in BMP, GIF, or JPEG format (configurable: position, scaling)	
OPERATION		
Built-in Protocol	Pelco D	
Pan Travel	360° endless	
Tilt Travel	-10°~190°	
Manual Speed	0.5° ~ 90°/s	
Presets	256	
Preset Accuracy	+/- 0.100°	
Preset Speed	400°/s	
Cruise	2	
Sequence	8	
Auto Pan	4	
Privacy Mask	24	8 Black/White/Mosaic (3 levels)
Proportional Pan & Tilt	On/Off	
Resume after power loss	Yes	
Zone Title	16	
Home Function	Preset, Sequence, Auto pan, Cruise	
Auto Flip	Digital / Mechanical / Off	
FUNCTIONS		
Motion detection	On/Off	
Day/Night: IR Cut Filter	On/Off	
Digital slow shutter	On/Off	
Stabilizer	N/A	On/Off (5Hz/10Hz)
PTZ coordinate data	Via API or Pelco-D (set/get)	
Directional OSD	Compass direction, Azimuth, Elevation	
Wide Dynamic Range	On/Off	On/Off (Ratio/Shutter/Iris levels 0-128)
CONTACTS		
Inputs	4 (3 general, 1 low pressure)	
Alarm Reaction	Preset, Sequence, Auto pan, Cruise	
NETWORK		
Interface options	RJ-45	

Item	Siqura HSD620PRH	Siqura HSD621PRH
Protocol	H.264, BP, MPEG-4 ES, RTP, UDP, IP, DHCP, IGMPv2, RTSP, (S)NTP, MX/IP, HTTP, SNMP v2, DiffServ, SAP, UPnP	
GENERAL		
Environment	Indoor/Outdoor	
Operating Temperature	Continuous -45°C to +50°C (-49°F to +122°F) 60° C. Max.	
Heater activation	N/A	15°C - 27°C (60°F - 80°F)
Ingress protection	IP67	
Regulatory	CE, FCC, RoHS	
Housing	Polycarbonate, glass-filled	
Bubble	Clear, Polycarbonate 0.29cm (0.115 in) thick	
Dimension	366 x 285 x Ø285 mm (14.4 x 11.2 x Ø11.2 in)	
Weight	5 kg (11 lbs)	
POWER		
Power	24 VAC	
Power Consumption	80 W	

Note: Weight and dimensions are approximate. All specifications are subject to change without notice.